

Curriculum Vitae

Mathew J. Simon
2600 Century Parkway
Atlanta, Georgia 30345

Job Title: Forensic Chemist

Education: Grand Valley State University:
Bachelor of Science, 4/26/97
Chemistry major, Criminal Justice minor

Experience: Bureau of Alcohol, Tobacco, Firearms & Explosives
February 2008, to present, Fire Debris Analysis
October 2008, to present, Explosives Analysis

Georgia Bureau of Investigation:
July 1999, to February 2008, Drug Identification
January 2003, to February 2008, Fire Debris Analysis

Alabama Department of Forensic Science:
June to August 1996, Intern, Drug Chemistry

Certifications and Memberships:

Bureau of Alcohol, Tobacco, Firearms, and Explosives
Certificate of Competency: Fire Debris Analysis, 4/2008 to present
Certificate of Competency: Intact Explosives, 10/2008 to present
Certificate of Competency: Post Blast Explosives, 10/2009 to present

Georgia Bureaus of Investigation, Division of Forensic Science
Certificate of Authorization: Drug Identification, 10/1999 – 2/2008
Certificate of Authorization: Fire Debris Analysis, 2/2003 – 2/2008

American Board of Criminalistics (ABC)
Certification as Drug Analysis Fellow, 11/2007 to 7/2010
Certification as Fire Debris Fellow, 12/2009 to 1/2022

International Association of Bomb Technicians and Investigators (IABTI)
Member, 2012 to present

Missouri State Highway Patrol, E&E
Certified in Clandestine Laboratory Enforcement Procedures and Safety Requirements
Following the requirements of 29 CFR 1910.120 (q), 2001, completed 11/2001

Clandestine Laboratory Investigating Chemists Association (CLIC)
Regular member, 2002-2008.

Training Received

Drug Identification Training	GBI, Robert Ollis	7/1/99 - 9/30/99
GCMS Chemstation / Inst Operation	Agilent Technologies	8/99 (1 week)
Forensic Chemist Seminar	DEA	4/01 (1 week)
Intro to Liquid Chromatography \ and HPLC Chemstation	Agilent Technologies	11/13-16/01
Clandestine Laboratory Certification 29CFR1910.120 (HAZWOPER)	Missouri State Highway Patrol, E&E	11/26-30/01
Explosives Analysis	WFLETC, Atlanta (40hrs)	2/02 (1 week)
CLIC seminar	in New Orleans	9/3-6/02
Practical Topics in GC and HPLC	Agilent Technologies	10/4/02
Site Safety Officer 29CFR1910.120	GBI, E&E	11/19-21/02
Fire Debris Analysis Training	GBI, Brian Hargett	1/1/02 - 3/30/03
Laboratory Analysis of Fire Debris	FBI, Ron Kelly	1/6-10/03
Arson Investigator Level 1	GPSTC	9/15-26/03
MSD Chemstation Macro	Agilent Technologies	8/24-25/04
1100 HPLC Troubleshooting & Maintenance	Agilent Technologies	10/13-14/04
Advanced Fire Debris Analysis	NFSTC, Augusta, Me Reta Newman, Julia Dolan	9/26-29/05
Intro to Petroleum Refining, Technology and Economics	Colorado School of Mines James Gary	3/27-29/07
Capillary Electrophoretic Analysis of Clan Meth Lab Evidence	Washington State Police David Northrop	8/6-8/07
Fire Debris Analysis Training / Test to Competency	ATF, Sherrie Thomas/Allah Najam	2/08 to 4/08
Urban Post Blast Investigation	ATF (Atlanta Field Office)	5/19-22/08
Explosives Chemistry School	ATF (Ammendale, MD)	7/21/08 – 8/21/08
Explosives Analysis - Intact	ATF (Atlanta, GA)	4/08 to 10/08
Explosives Analysis - Post Blast	ATF (Atlanta, GA)	4/08 to 10/09
Post Blast Investigation	ATF (Greenville, SC) Don Baucom	5/18-22/09
Chemistry of Pyrotechnics and Explosives	Washington College Dr. John Conkling	7/27-31/09
Hazmat (EPA)	Haztrain (LaPata, MD) Charles Caughlin	8/3-7/09
NRT Recertification	ATF (Huntsville, AL)	8/11-13/09
NRT Recertification	ATF (College Station, TX)	4/6-8/10
Fundamentals of X-ray Powder Diffraction	ICDD X-ray Clinic	6/7-11/10
Dipole Might	Hill AFB, UT	6/28/10-7/2/10
Holston / Radford Army Ammunition Plant Tour	Radford, VA and Kingsport, TN	8/24-27/10
Southern Association of Forensic Science Meeting	Tunica, MS	9/20-23/10
Homemade Explosives Course	ATF (Huntsville, AL)	10/17-22/10
Dipole Might	Hill AFB, UT	11/14-19/10
NRT Recertification	ATF (Huntsville, AL)	8/8-12/11
IABTI Conference	Nashville, TN	9/10-14/11
NRT Recertification	ATF (Huntsville, AL)	7/31/12-8/3/12
HME Workshop	ATF (Huntsville, AL)	10/8-12/13
Safe Explosives Handling Practices Course	ATF (Huntsville, AL)	6/12-13/13
NRT Recertification	ATF –FLETC	8/12-15/13
HME International Conference	ATF (Huntsville, AL)	5/5-9/14

Training Received continued

NRT Recertification	ATF (Huntsville, AL)	9/8-12/14
Ion Chromatography Software and Instrument Troubleshooting	Thermo / Dionex	9/15-19/14
Mass Spectrometry Conference	ASMS – Clearwater, FL	1/23-25/15
Homemade Explosives Course	LANL – LosAlamos, NM	3/9-13/15
NRT Recertification	ATF (Huntsville, AL)	5/4-8/15
HME Conference	ATF (Washington D.C.)	9/1-4/15
NRT Recertification	ATF (Huntsville, AL)	3/7-11/16
HME Course, Event Horizon	Somerset, UK	2/12-24/17
NRT Recertification	ATF (Huntsville, AL)	3/6-10/17
IABTI Conference	Green Bay, WI	6/12-16/17
SAFS Conference	Cincinnati, OH	9/21-22/17
Fentanyl Workshop (SAFS)	Cincinnati, OH	9/19/17
	Tim Mckibin	
NRT Recertification	ATF (Huntsville, AL)	3/5-9/18
The Forensic Examination of Pipe Bombings	St.Louis, Mo	10/29/18-11/2/18
	Ed Bender	
CES Basic Explosives Course	Huntsville, AL	7/8-26/19
NRT Recertification	ATF (Huntsville, AL)	8/26-30/19
NRT Recertification	ATF (Huntsville, AL)	3/2-6/20
Chemical Energetics Course	Special Programs Division	3/24-28/21
	Dugway Proving Ground, UT	
NRT Recertification	ATF (Huntsville, AL)	8/16-20/21
NRT Recertification	ATF (Camp Douglas, WI)	4/26-28/22

Training Given and Citations

Trained numerous laboratory technicians to perform activated charcoal strip extractions

Trained numerous laboratory technicians to operate UV, GCMS, FTIR, and TLC

Trained various police and fire departments on evidence packaging and submission

Trained various police and fire departments on indicators and dangers of Meth Labs

Instructor for Arson Investigator Level 1 at Georgia Public Safety Training Center (GPSTC) concerning evidence collection, preservation, testing - 2004 to 2008

Instructor for GBI Advanced Clan Lab Course at GPSTC (for GBI and Drug Task Force agents) - 2005

Author, "Instrumental Data for Drug Analysis, third edition" ISBN 0-8493-1974-9 (2005)

Guest lecture on Arson Investigation and Fire Debris Analysis for North Georgia College in Dahlonega, GA – 3/2011

Guest lecture on Explosive Materials and Devices for Active Shooter Seminar for Fulton County in Johns Creek, GA – 6/2011

Instructor for State and Local Fire and Law Enforcement (Home Made Explosive) Lecture in Cleveland, GA – 12/2011

Instructor for ATF Diplomatic Security Special Agent Course (Home Made Explosives) in Huntsville, AL – 4/2012

Instructor for ATF International Post Blast Investigation Course (Post Blast and Home Made Explosives) in San Salvador, El Salvador – 5/2012

Guest lecture on Meth Labs and Home Made Explosive Chemicals for IABTI in Nashville, TN – 9/2012

Instructor for numerous ATF Home Made Explosives (HME) Courses - 2012-present

Instructor for numerous ATF Post Blast Investigation Course - 2009-present

Instructor for numerous ATF Explosive Device Exploitation Course - 2018-present

Crime Scene Response

Meth Lab response – Hall County, GA, 7/18/02
Meth Lab response – Dougherty County, GA, 7/18/02
Meth Lab response – Crisp County, GA, 2/21/03
Meth Lab response – Schley County, GA, 2/22/03
Meth Lab response – Miller County, GA, 5/25/03
Meth Lab response – Coffee County, GA, 11/24/03
Meth Lab response – Webster County, GA, 1/20/04
Meth Lab response – Crisp County, GA, 5/24/04
Meth Lab response – Early County, GA, 6/9/04
Meth Lab response – Dougherty County, GA, 6/17/04
Meth Lab response – Marion County, GA, 5/2/06
NRT response – Bowdon, GA, November 2008 – fire destroying wheel and tire factory
NRT response – Garner, NC, June 2009 – explosion at ConAgra Plant
NRT response – Edmond, OK, October 09 – fire destroying apartment complex
NRT response – Hoover, AL, January 10 – fatal fire at hotel
NRT response – Superbowl detail in Miami, FL, 2010
NRT response – Atlanta, TX, March 2010 – fire at lumber plant
NRT response – Sheboygan, WI, July 2010, fire destroying pallet factory
NRT response – Conroe, TX, October 2011, fire destroying Garden Ridge store
Search warrant response with ATF Atlanta Field Division, 5/30/12, pipe bomb and other explosive / arson materials and documents
Search warrant response with ATF Atlanta Field Division, 3/26/13, post blast vehicles and other objects, exploding targets
NRT response – Des Moines, IA, March 2014, fire destroying Yonkers building
NRT response – Slidell LA, September 2015, fire/explosion at apartment complex
NRT response – Union, WV, March 2016, fire destroying lawn equipment retail/repair shop
NRT response – Raleigh, NC, August 2017, fire destroying apartment complex
NRT response – Holly Hill, SC, January 2018, fire destroying business
NRT response – Colona, IL, February 2018, fire destroying commercial truck repair business
NRT response – Birmingham, AL, September 2018, fire destroying apartment complex
NRT response – Grand Rapids, MN, March 2020, fire destroying behavioral treatment center
NRT response – Nashville, TN, December 2020, explosion downtown
NRT response – Los Angeles, CA, July 2021, LAPD TCV explosion
NRT response – Romney, WV, February 2022, fire destroying building at school
NRT response – Friday Harbor, WA, April 2022, fire destroying several downtown buildings
NRT response – Cleveland, TN, April 2022, fire destroying Olympic kayak center
NRT response – Mesa, AZ, December 2022, fire destroying Public Storage facility

Explosives Projects

Synthesis of Ammonium Nitrate from Calcium Nitrate and Ammonium Sulfate.
Synthesis of Potassium Chlorate from Clorox Bleach (sodium hypochlorite) or pool bleach (calcium hypochlorite)
Synthesis of Erythritol Tetranitrate (ETN) from both lab grade chemicals and over-the-counter materials such as drain cleaners, sweeteners, and fertilizers.
Synthesis of Hexamine and RDX from both lab grade chemicals and over-the-counter materials such as RV deodorants, household ammonia, camping heat tablets, and concentrated nitric acid.
Synthesis and Concentration of Nitric Acid from over-the-counter materials such as fertilizers, food preservatives, and drain cleaners. Process included use of simple distillation and extraction methods.

Testimony

Qualified as an expert witness in Drug Identification
Federal Court in Georgia and Alabama
Superior, State, and Juvenile Courts of Georgia

Qualified as an expert witness in Fire Debris Analysis
Federal Court in Georgia, Tennessee
Superior Court of Georgia
State Court of Mississippi

6/6/22 Federal Court - Memphis, TN US v. Unique Brooks 21-CR-20159

Qualified as an expert witness in Explosives Analysis
Federal Court in Florida, North Carolina, Tennessee
State Court of Louisiana

3/9/22 Federal Court - Nashville, TN US v. Cecil Masters 19-CR-00012

11/15/22 Federal Court - Alexandria, LA US v. Daniel Aikens 20-CR-00023